

Well 2020 is over and I hope that we can get back to some form of normalcy at some point in 2021.

The WWTA is going to put out a monthly newsletter the third Monday of every month in order to keep members informed, provide guidance, and encourage participation.

### Commentary-Dave Pasolli-Western Wood Truss Association of Alberta

#### **Are Structural Engineers of Record putting themselves out of a job?**

I was recently talking to a truss fabricator about a Structural Engineer of Record (SER) requiring the supplier to provide a Schedule “C” letter or Assurance of a Professional Field Review and Compliance. I have also noticed some fabricators are now being asked to size the dimensional lumber columns under beams.

The traditional response from truss suppliers has always been “we are not engineers, we are component suppliers” and we have tried to draw a definitive line where our responsibilities end. Yet a lot of times we cave in and supply services that cross the line because we feel we must in order to get the job. Usually we don’t get paid for it and the line gets blurry.

If SER’s continue to ask for others to supply services, perhaps we need to take a more innovate approach to the problem. We often ask ourselves how we can get a bigger piece of the components that go into a job. Maybe a better question is how we can get a bigger piece of the total job, and get paid for it.

Innovation in our industry does not have to be limited to the production floor. A good innovative example is Disney. If the Directors of Disney stuck to their guns and said all we do is make kids movies and run theme parks and we do not want to go beyond what we do they would probably be in trouble now. In 2018, Disney fully embraced the shift in consumer behavior toward personalized, on-demand entertainment. Disney began to remake itself for a direct-to-consumer future. Probably a pretty good idea considering their theme parks and movie theatres are going to be closed for a full year.

Consider how the process currently works for a typical multi-family job. The SER does a full overall design of the job, I don’t know how long this takes, but it does take time. Then the owner or contractor puts this information out to get bids from several suppliers. Several truss companies take the structural drawings and usually try to come up with some cheaper way to meet the specifications at the request of the contractor to “value engineer” the job with their stable of products. This may take a week or two for each of them. The supplier with the lowest price gets the job and then usually submits drawings for review to the SER detailing what they have done to save money for the contractor, at

this time the PO has been issued for supply. The SER reviews the drawings and has to struggle if they are acceptable, being pressured by their customer to save money. The SER often thinks why did I do all this design if it is just going to be changed anyway. Once everything is either approved or change orders are issued for what was not quoted is settled the supplier goes about sourcing the material and manufacturing the product.

I can understand why the SER decides to say “Hey, if you are not going to supply what I specified someone else take care of the responsibility and inspection”.

There have been quite a few studies showing the advantages of using pre-fabricating walls and floors for builders and the time and money they can save them. Yet I don’t think anyone has really looked at the advantages combining the design and supply of a project for a builder.

Imagine if we combined the SER responsibilities with the supply and fabrication of the project. Rather than supply and install, why not design and supply. The builder would work directly with the supplier to do the work the traditional SER would do, which would result in it only having to be designed once. This would save considerable time in the tendering and review process. The job could be “value engineered” from the start based on the current products available and not be subject to price volatility or market availability. Best of all the price of all those engineering services like inspections could be included in the price of the design and supply. I think the time from the start of design to completion could be reduced dramatically for the builder.

If we are open to innovation this may very well be a better process than what we are doing now. Of course, I know SER’s do much more than just the floor and roof design but I wonder if this issue is also happening with other components of the building. Or maybe the truss company acting as a SER could either do this engineering themselves or sub it out to a specialty engineer.

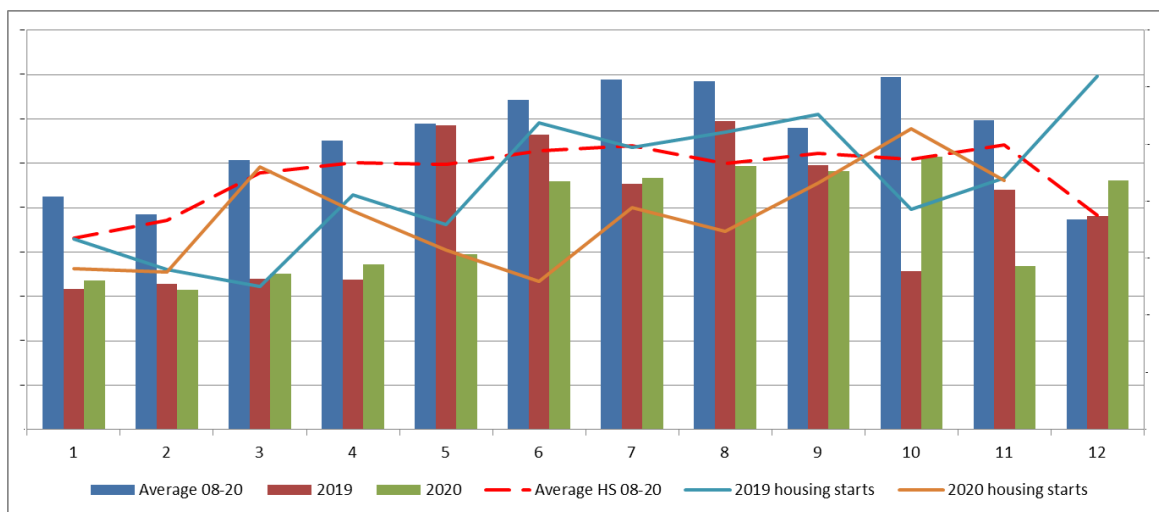
Builders and Project owners would also have to change their way of thinking away from the lowest bidder mentality to a partnership mentality with their designer and supplier, but there are probably some innovative builders out there that could see the advantages. It is interesting when you consider that out of all the potential engineers there are in a city only a handful of them tend to show up over and over again, so builders can get comfortable with the same people without shopping their services for every job.

If Structural Engineers of Record are going to continue to rely on the responsibility of others to provide engineering services is this the eventual end of the road, they may be putting themselves out of a job.

I don't know if this is the future, but I do know true disruptors start with a small idea and see if it grows. They do not all of a sudden just commit to changing their whole business, but like Disney they don't just say this is all that we do and we are sticking to it, we are not in that business.

If you have an idea for a commentary or would like to submit your own commentary for a future newsletter please let me know at [dave@wwta.ab.ca](mailto:dave@wwta.ab.ca)

## Economic Update



The above graph measures Alberta housing starts (Lines) and truss production (bars, based on plate purchases) by month. Housing started off strong towards the end of 2019 but hit a decline in March rebounding in the second half of the year with the total for 2020 only being down about 10% from 2019, and about 9% lower than the long term average. Amazingly truss production was only down about 5% from 2019 but well off the long term average down 29%.

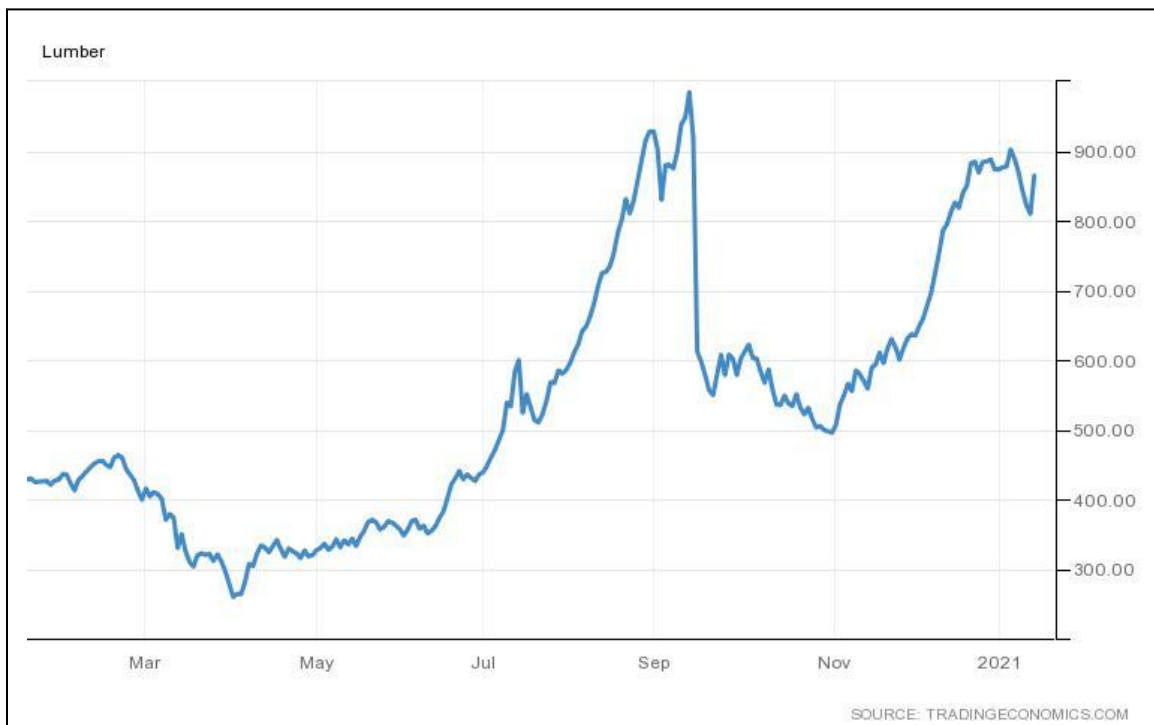
As we learned towards the middle of the year the biggest effect on your business would turn out to be lumber pricing as production declined due to the pandemic and wildfires and the demand in the United States boomed impacting the price of a 2500 square foot single family home by as much as \$30,000 says the President of the Canadian Home Builders Association.

The New Year is seems to be starting out with rising lumber cost again.

“Lumber sales barely missed a step over the holiday break. As 2021 dawned, rail service got significantly worse.” — Madison’s Lumber Reporter

<https://www.woodbusiness.ca/new-year-2021-starts-off-with-rising-lumber-prices/>

# Western Wood Truss Association of Alberta January 2021



Covid-19 cases are not the only thing that is experiencing a second wave as lumber is surging into 2021.

In a report, RBC cited strong wood product demand and the lower U.S. lumber import duties for its bullish rating.

In a new forecast out December 22, 2020, RBC raised its composite price estimate for lumber in 2021 to an average of US\$575 per thousand board feet, up from US\$475. Its average price is US\$560 for this year.

The price volatility and shortage of supply of some wood products means headaches for homebuilders trying to take advantage of the current strong market for new houses that is expected to continue in 2021, said Kevin Lee, CEO of the Canadian Home Builders' Association.

Higher prices are encouraging Western Forest Products Inc. of Vancouver to redirect logs harvested on the West Coast that might have previously been exported to Asia into its Canadian mills to make value-added products, said CEO Don Demens.

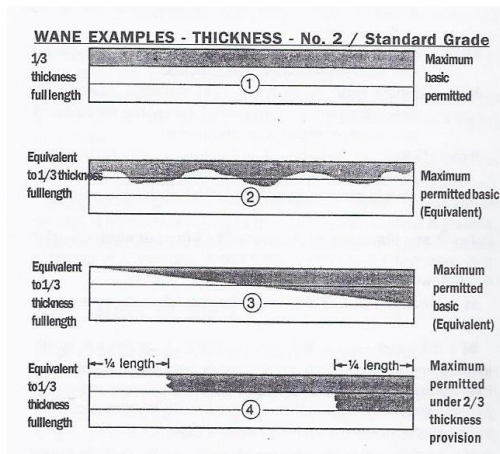
Next month I am going to dive a little bit into steel pricing.

**Quality Control**

Each month I am going to focus on a specific issue that you can use for your monthly Quality Control Meeting if you wish. If there is something you would like me to write about please send me an e-mail and I will try and include it.

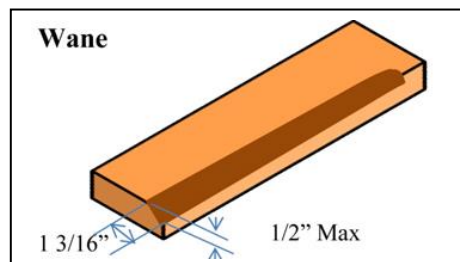
This month I am going to focus on wane in lumber. Some of the most frequent questions I get have to do with allowable wane and what is acceptable. Of course, what is allowable at the mill for wane may not be acceptable at a truss plant when you are trying to plate a joint, they don't consider this at the mill, go figure. Therefore most plants restrict the amount of wane they allow to be less than the grade standard.

According to AFPA wane is listed as a fraction of the thickness, width, or length but it can be taken on as an equivalent basis. If wane is narrower than the allowed amount it can be longer than the allowed amount for example. This means that the shorter the length of the wane the more it can go along the face or the edge.



So if the wane is short enough it is possible that it could go across 2/3 of the width of the board, which is not very good for plating. Keep in mind the grading rule is also relative to the width of the board, so it allows for more wane on a wider board, 1/3 the width of a 2x8 would allow the wane to be 2 7/16" wide.

This is why we generally limit the wane to the allowable on a 2X4 for plating purposes.



# Western Wood Truss Association of Alberta January 2021

One of the best tips I have come across in dealing with wane was from Eldor Trusses. Because a lot of the time the wane will only be on one face and if that face is on the bottom side of the table it may be missed when placing the plates because it can't be seen. When examining the lumber before placing it, the worker would mark the location of the wane on the opposite side of the board with a marker so that in the case a plate had to be placed over the wane they would easily identify that it would have to be upsized.



Of course the real problem lies when the wane falls under a plated joint, if it is within the panel it is not so much of a problem.



In the example above the wane is making 3 rows of teeth in this plate ineffective. Therefore, the plate should be upsized by 1" (4 rows of teeth) on the bottom chord as a general rule if you are not doing a tooth count.

There is more detailed information on the WWTA online training system in module #107 Lumber Grade and Quality.

### Health and Safety Toolbox

Similarly to the Quality topic the WWTA would like to give you a monthly item you can discuss when doing your Safety Toolbox meeting. This month we are going to focus on **Slips, Trips, and Falls** which is one of the leading causes of WCB claims and a focus in their Prevention Initiatives campaign in Alberta.

The Alberta Government recently published a group of bulletins titled “Don’t Slip into Winter”, “Don’t Trip into Winter”, and “Don’t Fall into Winter” and they can be downloaded at the Government Pub site:

<https://ohs-pubstore.labour.alberta.ca/slips-trips-and-falls>

There is good information here for both workers and supervisors that could easily be reviewed and distributed at a toolbox meeting to discuss.

The prevention of slips, trips, and falls is very relevant in a truss plant and employers need to pay close attention of icy conditions outside and tripping hazards in the plant. Falls are primarily a concern when loading trucks or working on a moving staircase.



For members of the WWTA who hold a COR, 2020 was certainly different as most of the year on-site auditing was not a possibility and we were restricted to doing documentation only audits. As the pandemic continues into 2021 employers will still need to restrict on-site auditing for the time being.



In a normal year with onsite auditing there are 3 methods of gathering information through documentation (D), interviews (I), and observations (O). Typically Interviews and Observations would require the auditor to be on site.

During the pandemic period in 2021 employers will have 2 certification options to maintain their COR.

If they choose to do an external documentation only audit, similar to 2020, they would be eligible for a 1 year COR if they achieve a total score exceeding 80%. If they do an internal documentation only audit this could qualify as a maintenance option.

Employers could also qualify for a full 3-year COR if they pass an external audit that includes both documentation and interviews. The interviews would have to be conducted remotely either by phone, web based platforms or by limited interviews. The passing score for certification audits would be 80%.

If at some point in the year we get past the pandemic employers will also have the option of completing a full audit with documentation, interviews, and observations provided they are capable of developing and following safe auditing guidelines for both the employer and auditor abiding by provincial guidelines.

These options will remain in place for the entire year of 2021 even if the pandemic is over.

The Alberta Government has a new format OHS eNews you can subscribe to with all kinds of good material at: <https://ohs-pubstore.labour.alberta.ca/>

## News and Events

### **Annual General Meeting**

It looks like we are going to be doing another Annual General Meeting from your computer. Please save the date of March 19 from 9:00 to 11:00 for the meeting. You will be getting a Go-To-Meeting invite by e-mail that I would ask you to accept when you receive it.

I will also be sending out a package with the 2020 financials and motions for members to vote on prior to the meeting in February. We are also looking for your company to join the Board of Directors, so if you are interested please contact Dave at [dave@wwta.ab.ca](mailto:dave@wwta.ab.ca)

### **Wage Survey**

It is time again to complete your wage survey for 2020, look for the form to be e-mailed out to the managers the last week in January and I would ask you to get them back to me by the end of February. As per usual only those companies that contribute will receive the results.



### **Members Mandate Survey**

The Board of Directors reviewed the recent Members Mandate Survey at our December Board of Directors meeting and began drafting an action plan based on your input.

A big part of the focus of the WWTA going forward will be based on recommendations from a newly formed Steering Committee and your expertise and input is required. Unfortunately on the survey I asked the question if you would be willing to participate, but I was not able to determine who said yes, so if you said you would be willing to participate please contact me as we would like to get started by the end of January.

### **Virtual Meetings**

One day we will get back to meeting in a room I hope, but in the meantime if you have any topics you would like the WWTA to hold a virtual meeting on please let me know.

Mount Royal University has a growth catalyst program running sponsored by Alberta Innovates that has some interesting and relevant topics. Hopefully some of you were able to watch the latest one I sent to you from Shawn Kanungo on “Strategy in a World of Disruption”. There was definitely some interesting information of what the world may look like in the future and how some companies are being innovative. If you want to see this presentation to:

<https://fast.wistia.net/embed/channel/59xb5td2ji?wchannelid=59xb5td2ji&wmediaid=r1y5i1f4xt>

### **WWTA Online Training**

If you have not yet taken a look at the WWTA online training program I would encourage you to, as no doubt you will be hiring new workers in the near future and it is a good method to get them productive earlier and safer. If you want an overview of the program go to the WWTA website at: <http://www.wwta.ab.ca/truss-training-online.html>

### **Did You Know?**

The WWTA has a position on adding solar panels to existing roofs. The bulletin can be viewed on our website at: <http://www.wwta.ab.ca/position-policy.html>

Thanks for taking the time to look at the WWTA newsletter, if you have any comments, contributions, or ideas please get them to me at [dave@wwta.ab.ca](mailto:dave@wwta.ab.ca). Also check out the website at [www.wwta.ab.ca](http://www.wwta.ab.ca).